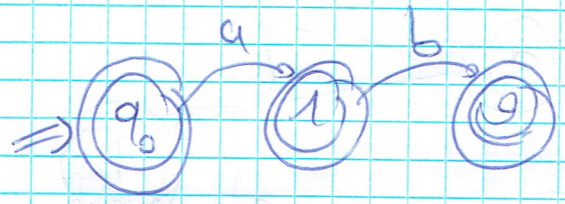
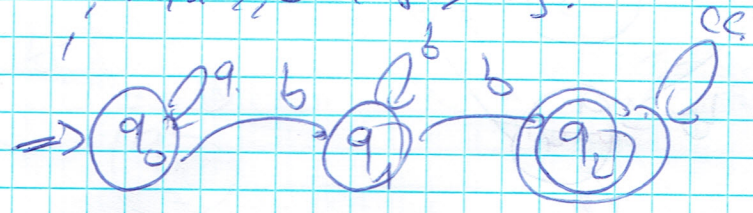
Série 3 :

Exo 1 :

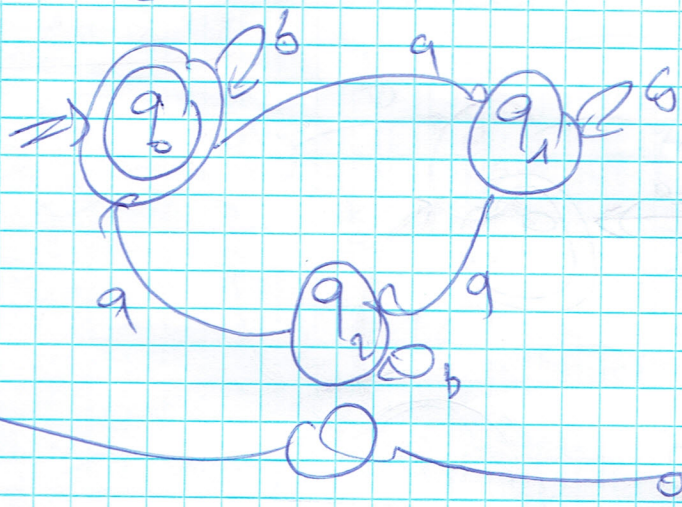
$L_1 = \{\varepsilon, a, ab\}$



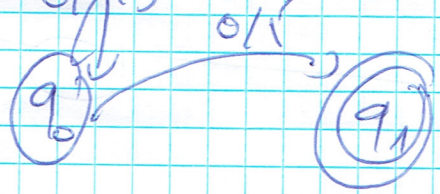
$L_2 = \{a^i b^j c^{2k} ; k, i \geq 0, j > 1\}$.



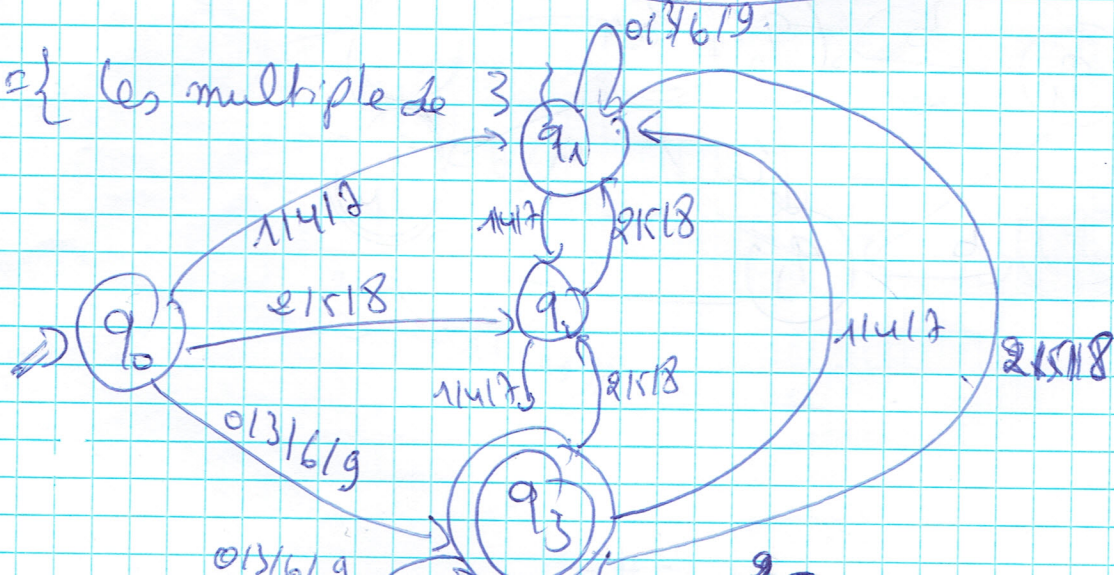
$L_3 = \{\omega \in \{a,b\}^* ; |\omega|_a \equiv 0[3]\}$.



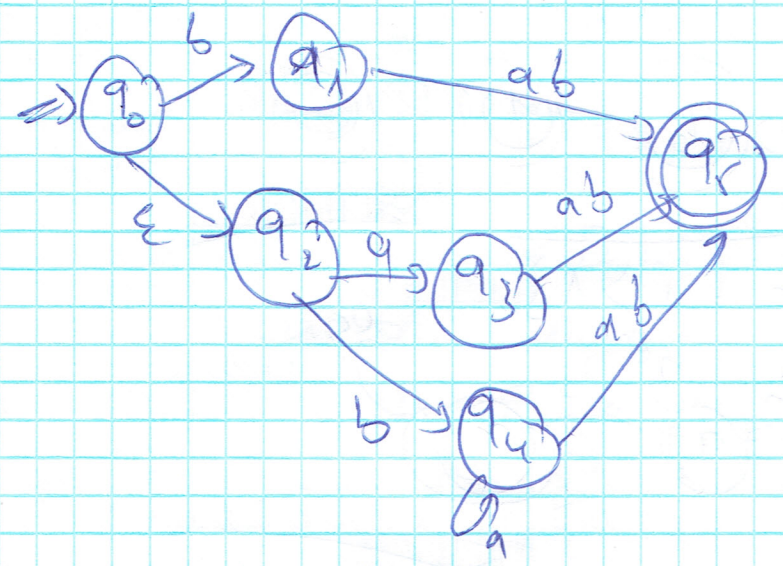
$L_4 = \{$les multiples de 5$\}$.



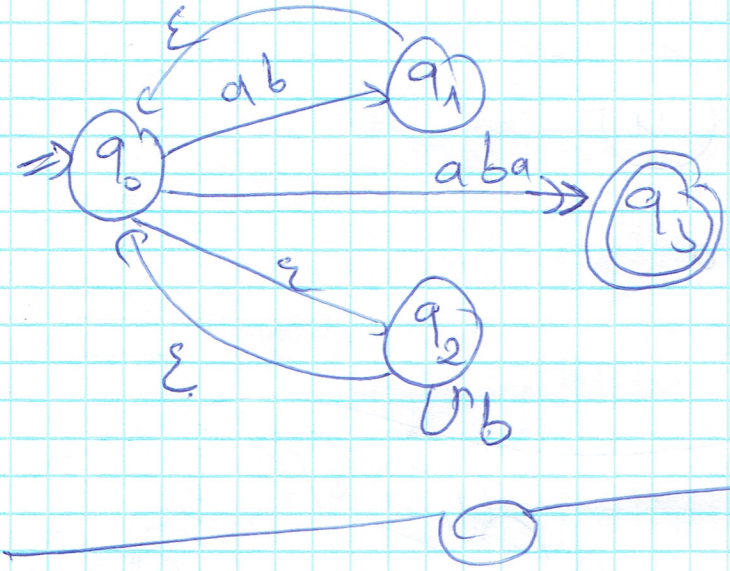
$L_5 = \{$les multiple de 3$\}$



$L_6 = (a + ba^*) + b)\, ab.$

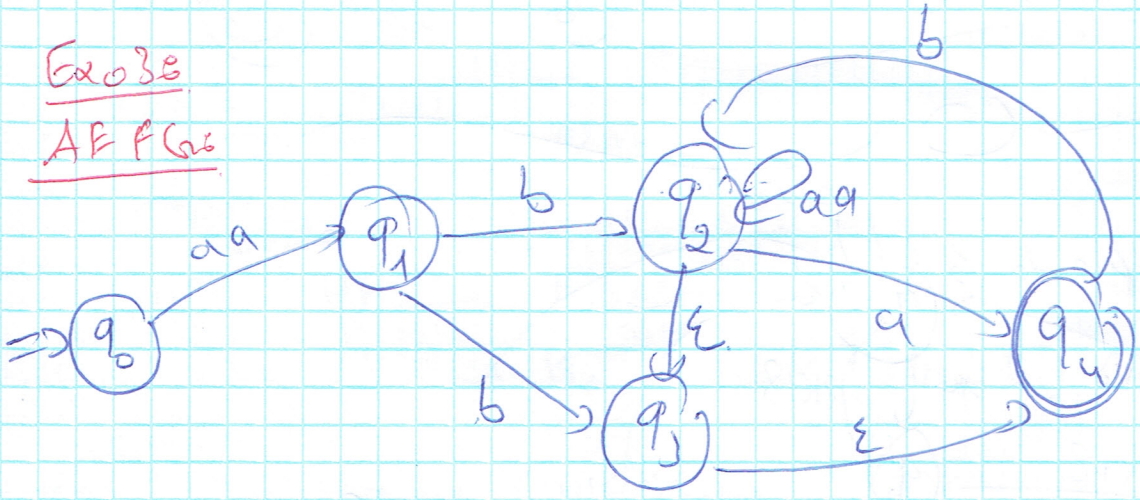


$L_7 = (ab + b^*)^*\, aba.$

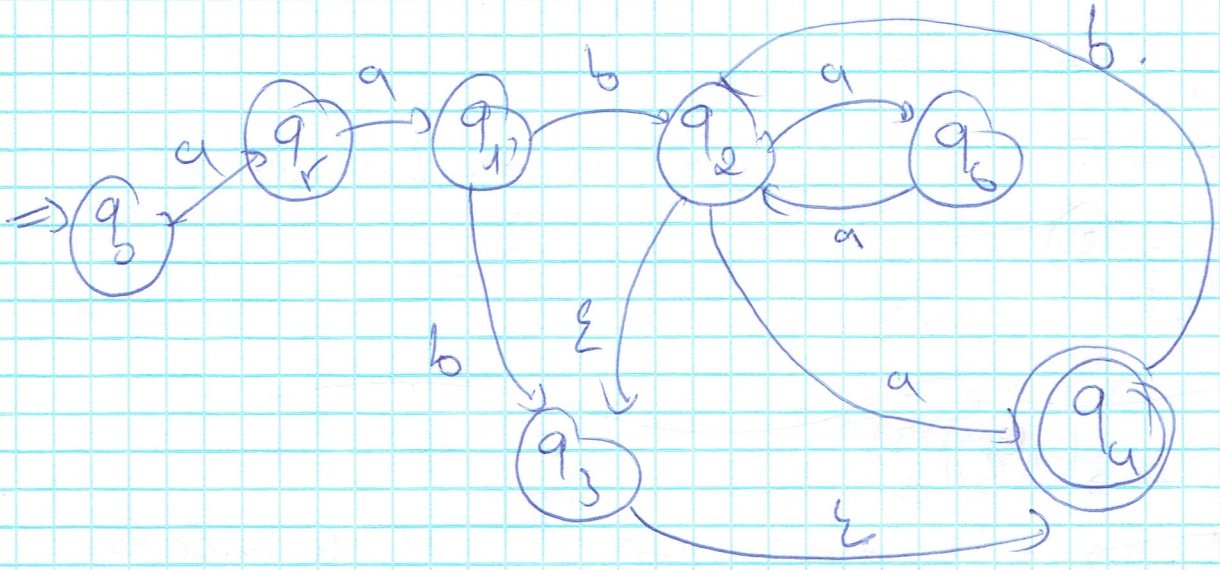


Εαρβε

ΑΕΠΓΑ

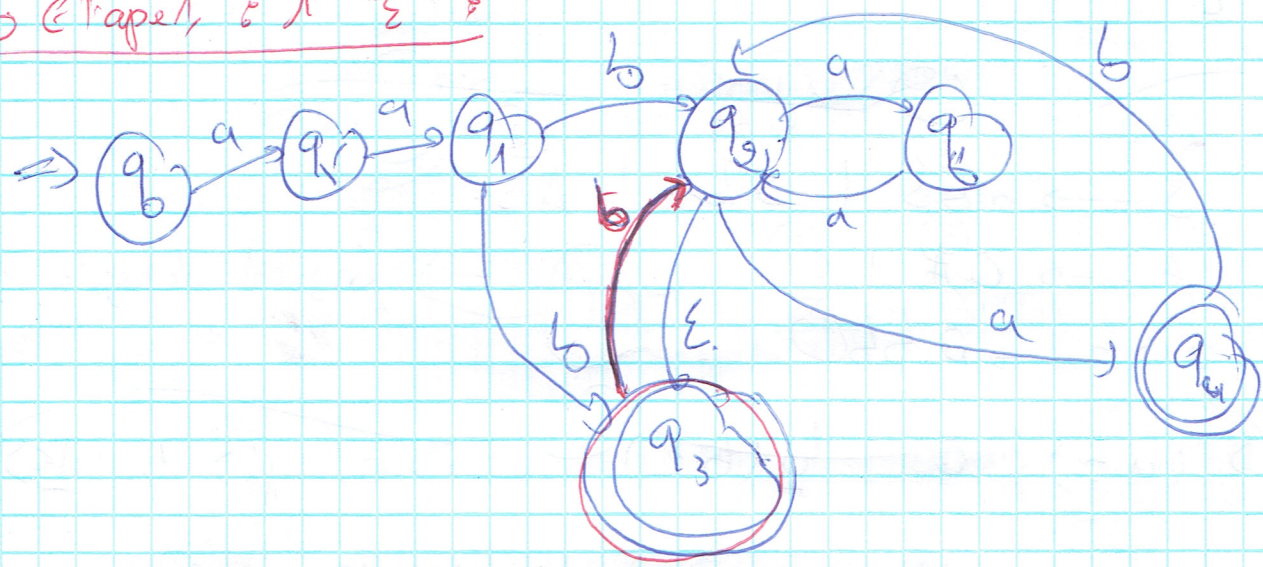


1) Élimination des mots : AEFPG :

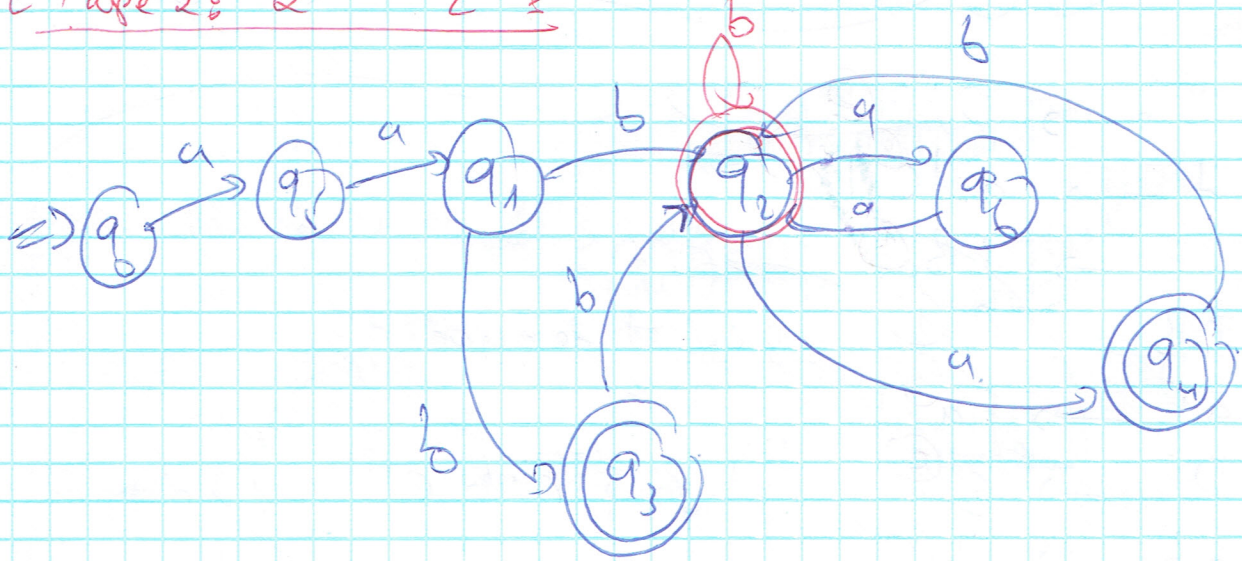


2) Élimination des ε transition : AEFS

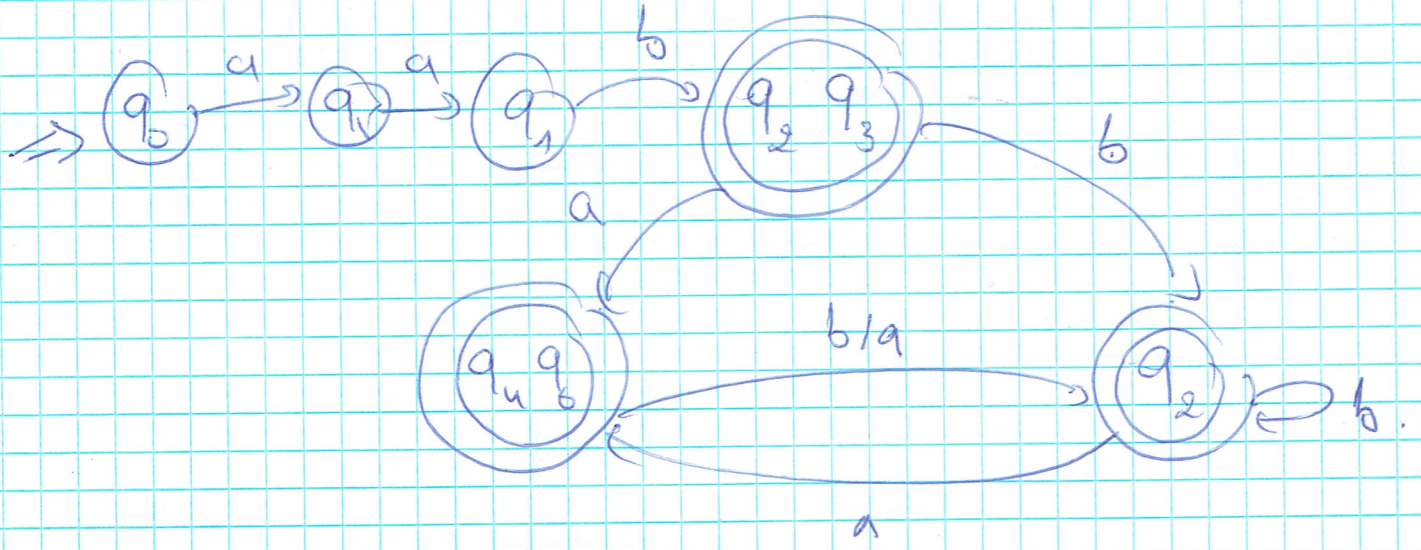
① Étape 1 : " ε "



Étape 2 : " ε "



	a	b
⇒ q_0	q_1	—
q_1	q_1	—
q_1	—	$q_2 q_3$
⊙ $q_2 q_3$	$q_4 q_6$	q_2
⊙ q_2	$q_4 q_6$	q_2
⊙ $q_4 q_6$	q_2	q_2



2) Le langage reconnu par l'AEF A est :

$$L(A) = aab\left[b(b^*a(a+b))^*(b^* + b^*a) + a((b+a)b^*a)^*(\varepsilon + (b+a)b^*)\right] + aab$$

ou bien.

$$L(A) = \{aabw,\ w \in \{a,b\}^*\}.$$